Application No.: 10/053,376

Office Action Dated: June 21, 2005

PATENT REPLY FILED UNDER EXPEDITED PROCEDURE PURSUANT TO 37 CFR § 1.116

REMARKS

Claims 1-11 and 23-26 are pending in this application, all of which stand finally rejected as a result of the June 21, 2005 Office Action. Claims 1-7, 9, and 23-26 have been rejected under 35 U.S.C. § 102(e) as being anticipated by U.S. Patent No. 6,760,903 (Morshed). Claims 8 and 10-12 have been rejected under 35 U.S.C. § 103(a) as being obvious over Morshed in view of U.S. Patent No. 6,446,137 (Vasudevan). Claim 10 has been rejected under 35 U.S.C. § 112, second paragraph as be indefinite. Following entry of the amendment, claim 10 will have been amended.

Applicants respectfully submit that the rejection of the claims overlooks significant differences between the claims and the prior art. These differences were discussed in a July 12, 2005 telephone interview between the Examiner and the undersigned, and are set forth below. For the reasons discussed herein, applicants request reconsideration of the rejection, and submit that this case is in condition for allowance.

The July 12, 2005 Interview

On July 12, 2005, an interview between the Examiner and the undersigned was held by telephone. The following points were discussed, specifically in the context of claims 1, 2, and 10:

- Claim 1: The prior art does not show that a first device *instructs* a second device to provide event information about a procedure that executes at the second device. While the prior art may show that execution information is provided, claim 1 calls for more than the mere provision of this information, but specifically calls for a first device to *instruct* a second device to provide this information. The claimed instruction is not found in the prior art.
- Claim 2: The prior art does not show that a limitation on the content of event information to be provided is specified and then honored. The Examiner misinterprets the claim limitation as merely calling for a "limited" amount of event information to be provided, and indicated in the interview that "limited" was understood as an arbitrary characterization of the quantity of information being provided. The claim does not merely call for a "limited" amount of

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information, but rather calls for the limitation on the content to be provided to be specified, and then calls for the specified limitation to be honored.

• Claim 10: The prior art does not show the calling of a procedure on a remote device whose location or identity is not known at the time of the call. The prior art shows that the identity of a callee may be unknown at compile time, but is resolved in an initialization procedure when the program is run and therefore is known at the time of the call.

These features, and why they differentiate the claims from the Morshed and Vasudevan references, were discussed in the telephone interview but no agreement was reached. Applicant submits that the foregoing remarks satisfy the requirement to summarize the interview as set forth in 37 C.F.R. § 1.133(b).

Traversal of the grounds for rejection

The section 112 rejection

The present amendment to the claims addresses the section 112 rejection of claim 10 in the manner suggested by the Examiner.

Claim 1

Independent claim 1 calls for a first device to issue a first call which includes tracing information "instructing [a] second device to provide event information regarding the execution of [a] first procedure at the second device." Claim 1 has been rejected as being anticipated by Morshed. However, Morshed does not teach the act of "instructing a second device to provide event information." As to this feature, the Examiner has cited col. 35, ll. 18-31 of Morshed, which generally explains that "execution information" may be gathered about the execution of a called function, and that "out of band" data that is transmitted with the function call may be used in the gathering of the execution information.

Even if the "execution information" that is generated in Morshed can be considered analogous to the "event information" recited in claim 1, claim 1 is distinguishable form Morshed on the ground that Morshed does not *instruct* a second device to provide the execution information. As discussed in the interview, the Examiner's position is that either:

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(a) the out of band data contains an instruction to provide the event information, or (b) the call to a function is, in itself, an instruction. Applicants will address these points in turn.

First, the out of band data described in Morshed does not "instruct" a second device to provide event information. Neither the applied portion of Morshed, nor any other portion that applicants have been able to identify, describes the out of band data as containing the claimed instruction.

Second, the call to a function may be *an* instruction, but is not *the* instruction recited in the claims. A function call may instruct a function to execute, but it is possible to issue an instruction to execute a function without *also* issuing an instruction to provide event information. Morshed is limited to the former – i.e., an instruction or function call that causes a function to execute. However, what claim 1 recites is not merely an instruction to execute a procedure (i.e., the "first call"), but also tracing information that instructs a device to provide event information regarding the execution of the procedure. It is clear that the mere fact that a function is called in Morshed and that it provides event information does not mean that Morshed transmits tracing information that *instructs* a device to provide that information. As a simple example, the system in Morshed may automatically provide execution information about a function that has been called as a matter of course, in which case no instruction needs to be transmitted as part of the tracing information.

For these reasons, applicants respectfully request reconsideration of the section 102 rejection of claim 1, and request that the rejection be withdrawn.

Claim 2

The Examiner asserts that Morshed's "out of band data" teaches the claimed acts of specifying "a limitation on the content of the event information" and "providing a limited amount of event information in accordance with the specified limitation." In rejecting claim 2, the Examiner relies on col. 35, Il. 18-31 of Morshed. As discussed above, this portion of Morshed teaches that out of band data may be "used" in gathering execution information. However, the fact that out of band data may be "used" to gather execution information does not mean that the out of band data specifies a *limitation* on the amount of data to be gathered. For example, the out of band data could specify that additional data is to be gathered, rather than limiting the data that is gathered. Neither the applied portion of Morshed, nor any other

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portion that applicants have been able to identify, indicates that the out of band data imposes a limitation on what event information is to be provided.

Accordingly, applicants respectfully request reconsideration of the section 102 rejection of claim 2.

Claim 10

The Examiner has rejected claim 10 under section 103 as being obvious over a combination of Vasudevan. Claim 10 recites the feature of "calling a procedure on a remote device whose location or identity is undetermined at the time of the call." In rejecting claim 10, the Examiner acknowledges that "Morshed is silent with reference to calling a procedure on a remote device whose location or identity is undetermined at the time of the call." (Office Action, paragraph 23.) For the above-quoted feature of claim 10, the Examiner relies on Vasudevan's description of dynamic function calls.

In the interview, the Examiner explained, in essence, that Vasudevan's description of dynamic function calls teaches the claimed feature because, in dynamic calling, the actual function that will handle a call can be unresolved at compile time. However, what the Examiner overlooks is that claim 10 does not recite that the identity or location of the callee is undetermined at compile time, but rather that the identity or location of the callee is undetermined at the time of the call. In Vasudevan, it is clearly described that even if the callee's identity is unresolved at the time a program is compiled, that identity is known at the time of the call. A program in Vasudevan runs an initialization procedure that assigns a "back end" to handle function calls, so by the time a function is called the identity of the back end that will handle function calls for the program is known. In particular, column 12 of Vasudevan explains as follows:

The application 116 includes a call to initialize the handle in the client stub 120 to the VRPC backend 140 used to invoke the backend's send_call method. The application 116 invokes 400 this initialization method, for example VRPC_begin(), on the VRPC library 122, passing in an identification of a server interface being accessed. ... At some subsequent point, the main routine 118 invokes 409 the client stub 120 by calling one of the procedures defined therein, and passing in some number of arguments. The client stub 120 packages the actual arguments and the argument specification to create the

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procedure call, specifying the argument mode(s) and type of each argument, and the procedure description, specifying the procedure number, number of arguments, return type. The client stub 120 then invokes 408 the send call method. This call is forwarded by the VRPC library 122 to the selected VRPC engine 144 on the client computer 110.

In other words, the identity of the server is determined as part of an initialization procedure performed at runtime, and, by the time an actual procedure call is made, the identity of this server is known. Thus, Vasudevan does not teach the feature for which it is cited.

Accordingly, applicants respectfully request reconsideration of the rejection of claim 10.

Other claims

Claims 3-9 are dependent, either directly or indirectly, on claim 1, and thus are patentable at least by reason of their dependency.

Claim 2 is also dependent on claim 1. Thus, in addition to arguments relating to claim 2 discussed above, claim 2 is also patentable by reason of its dependency on claim 1.

Claim 11 is dependent on claim 10, and thus is patentable at least by reason of its dependency on claim 10.

Claim 23 recites an application program on a first device that issues a call to a second device, and an event handler that generates "first tracing information." Moreover, claim 23 calls for "the generation of said first tracing information being limited by a requirement that originates from the application program." In other words, the application program imposes a requirement that ultimately limits that tracing information that is generated. Claim 23 stands rejected as being anticipated by Morshed, and, specifically, the Examiner has cited Morshed's "out of band data" as teaching the feature that the tracing information is limited by a requirement imposed by the application program. As discussed above, Morshed's "out of band data" does not impose a limitation on what information is created; it is merely "used" in the gathering of information. Thus, for reasons similar to those discussed above in connection with claim 2, Morshed does not anticipate claim 23.

Claim 24 is dependent on claim 23, and thus is patentable at least by reason of its dependency.

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The Examiner does not provide a detailed rejection of claims 25 and 26, and instead merely states: "see the rejection of claims 23 and 24." Claim 25 recites the feature of: "the generation of said first tracing information being limited by a limitation requirement that is sent from the first computing device to the second computing device." For the reasons discussed above in connection with claims 2 and 23, this feature is not found in Morshed, and thus the section 102 rejection of claim 25 as being anticipated by Morshed should be reconsidered and withdrawn. Claim 26 is dependent on claim 25, and thus is patentable at least by reason of its dependency.

Drawings

The Examiner has not indicated that the formal drawings filed with the application have been accepted. It is requested that in a subsequent office action, the Examiner indicate that the formal drawings have been accepted.

IDS Submission of February 18, 2002

Applicants note that the IDS submission of February 18, 2002 has not been initialed by the Examiner. Applicants request that the Examiner return the February 18, 2000 IDS submission in a subsequent office action and indicate thereon that the references have been considered by the Examiner.

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Conclusion

All outstanding issues have been address by the amendments and remarks above, and all pending claims have been shown to be patentable over the applied prior art. Applicants therefore request reconsideration of the Final Rejection, and submit that the present case is in condition for allowance.

Date: August 22, 2005

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